

WHAT IS CLAIMED IS:

1. A holder for positioning a specimen slide on a microscope stage, comprising:
 - a baseplate, retainable on the microscope stage, in which is configured, for reception of the specimen slide, an opening with a rim,
 - flat support surfaces and at least one abutment surface, extending substantially perpendicular to the support surface, for the specimen slide are form at the rim, and
 - at least one spring element with which the specimen slide arranged in the opening of the baseplate is pressed against the at least one abutment surface of the opening, wherein the at least one abutment surface of the opening is configured in such a way that it exerts, on the specimen slide that is pressed against the abutment surface, a force component directed substantially downward onto the support surface of the opening.
2. The holder as defined in Claim 1, wherein the at least one abutment surface of the opening is configured in such a way that the side of the specimen slide resting against it makes contact only in a region spaced away from the support surface and arranged above the horizontal center line of the specimen slide.
3. The holder as defined in Claim 1, wherein an undercut which cuts away the contact region with the specimen slide is configured in the abutment surface in the transition region from the support surface to the abutment surface.
4. The holder as defined in Claim 3, wherein the undercut can be produced by milling, in particular using a conical milling cutter

5. The holder as defined in Claim 3, wherein the undercut can be produced by drilling.
6. An apparatus for laser cutting of specimens, comprising:
 - an X-Y microscope stage defining a stage surface;
 - a holder, arranged above the stage surface of said X-Y microscope stage and being positionable in X and Y directions, for positioning a specimen slide,
 - an opening for the specimen slide is formed in a baseplate of the holder, wherein the opening is configured with support surfaces and abutment surfaces for the specimen slide,
 - a spring element is mounted on the specimen slide for pressing the specimen slide against the abutment surface of the opening so that the a specimen on the specimen slide is located opposite the stage surface; and
 - a collection device having at least one container for collecting a specimen that has been cut out, wherein the collection device being conveyable to an open working space configured between the holder and the stage surface.
7. A microscope comprising:
 - an apparatus for laser cutting of specimens,
 - an X-Y microscope stage and a holder, wherein the holder is arranged above a stage surface of said X-Y microscope stage and is adjustable in X and Y directions, for positioning a specimen slide,
 - a baseplate being part of the holder and the specimen slide being arranged in an opening formed in the baseplate, wherein the opening has support surfaces and abutment surfaces for the specimen slide,
 - a spring element mounted on the base plate, so that a specimen arranged on the specimen slide is pressed by way of against the abutment surface of the opening and the specimen itself is located opposite the stage surface; and

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- a collection device, having at least one container for collecting a specimen that has been cut out wherein the collection device being conveyable to an open working space configured between the holder and the stage surface.

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